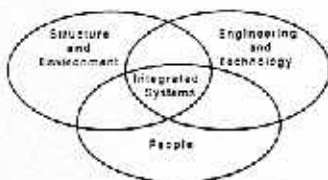




MANPRINT BULLETIN



Vol. II No. 1

"Remember the Soldier"

July 1987

Understanding the Proposal Process

by CPT R. Mark Brown

Introduction

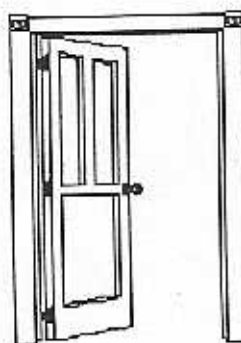
Since the federal government is spending billions of dollars annually on the defense budget, it is not surprising that these expenditures have come under increasing scrutiny.

Media horror stories of \$100 claw hammers, of defense systems that don't do the job or don't do it as well as expected, and of too many, too few, or the wrong types of spare parts, are rampant. Increased legislation, increased regulation from our acquisition leadership, and studies such as the Packard Commission report have failed to stop these stories.

What can be done to change this hostile environment? There are no easy answers. However, one step towards improvement would be to understand the proposal process that large defense contractors go through. By doing so, the government can save time, money, and aggravation by asking the correct questions in the correct form. Also, by understanding this process we can receive better proposals and hopefully avert wasted effort and expense by both the contractor and the government.

Understanding the Proposal

First, it is important to understand that proposal efforts by large defense contractors are large, complex, and expensive. Groups of talented people are assigned to these efforts for long periods of time and at great cost to the companies. The reason for this is clear. There are two key areas to any business:



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manufacturing and sales. You must have a product and you must sell it. In the defense contractor community, proposals are analogous to sales.

Secondly, the government is in the driver's seat. The solicitations state the desires, constraints, and expectations of those who want the product and the defense contractor must respond to these requirements or fail to obtain the contract. Therefore, it is crucial that the agency issuing the solicitation communicates clearly, directly, and precisely what is needed.

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Proposal Process

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In the long run, doing so reduces cost and increases efficiency for both government and contractor.

Communicating with those who are going to respond to solicitations involves many types of government procurements. These are summarized in Figure 1. It is important to communicate requirements clearly on all solicitations but particularly on the larger, more complex systems acquisitions.

So what is a proposal trying to do? Sell obviously; but more than that. The contractors are trying to communicate five things to you. Essentially, they are telling you what they are offering, how they are going to do it, why their way is better than the competition's, how much it will cost, and why their price is more realistic. In short, contractors are attempting to earn an invitation to negotiate and to establish a strong negotiating position.

In trying to do this, contractors have identified seven keys for success. Much like the principles of war for military commanders, these keys for success don't guarantee that a contractor will win every bid. But also like the principles of war, these keys establish a process that, if applied thoughtfully, will

enhance the chances of success. Furthermore, they will ensure that the likelihood of wasting time, money, and effort by moving in the wrong direction is less likely to happen. The keys for proposal success are:

- Start early
- Address the real problem
- Work the decision makers
- Know the competition
- Know your own strengths and weaknesses
- Develop a WIN strategy
- Implement it with proper tactics

It is important to note that the first two relate directly to those who issue solicitations. This is particularly true of addressing the real problem. This principle highlights the need for the government to communicate in simple, clear terms of what is desired in a solicitation in a timely fashion.

A proposal effort is divided into the pre-request for proposal (RFP) phase which includes all that goes on before the RFP is actually published in the *Commerce Business Daily*; the RFP phase which includes all actions between release of the RFP and

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TYPE	USED TO BUY	METHODOLOGY
GSA CATALOG	STANDARD COMMERCIAL ITEMS	ANNUAL PRICE COMPETITION
IFB	STD. GOV'T-DESIGNED ITEMS	AUTOMATIC AWARD TO LOW BIDDER
TWO-STEP (IFB)	STD. CONTRACTOR-DESIGNED ITEMS	AWARD TO LOWEST BIDDER QUALIFIED BY PH-EVALUATION
NEGOTIATED BIDS	HIGH-TECH GOODS & SERVICES	SOURCE SELECTION BOARD SCORES TECHNICAL, MGT, 4 PROPOSALS
• CONVENTIONAL	SMALL & NON-CRITICAL ITEMS	NEGOTIATIONS WITH ALL IN COMPETITIVE RANGE
• FOUR-STEP	R&D (ABOVE \$2M)	NEGOTIATIONS WITH WINNER
• A-109	MAJOR SYSTEMS OVER \$ THRESHOLD	MULTI-PHASE COMPETITION WITH PARALLEL CONTRACTS & SUCCESSIVE ELIMINATIONS
UNSOLICITED & SOLE SOURCE	CONTRACTOR-UNIQUE ITEMS & TIME-CRITICAL UNIQUE ITEMS	AWARD AFTER REVIEW, JUSTIFICATION, & PRICE NEGOTIATIONS
SPECIAL DOE	NEW PROCESS DEVELOPMENT	COST-SHARING, LOAN GUARANTEES, COOPERATIVE AGREEMENTS, ETC.

Figure 1. Common Types of Government Procurement

Proposal Process

(Continued from page 2)

proposal submittal; and the post-RFP phase which includes the actions that occur after the proposal is submitted.

Pre-RFP Phase

During this phase, the contractor attempts to gain as much information (intelligence) as possible about the impending solicitation. Information comes from a variety of sources, including rumor, contacts inside and outside the government, and publications. This is the time when contractor management starts to decide whether to commit assets to pursue this contract. Information gathering is an ongoing process.

Sometime before solicitation release, the contractor conducts an opportunity analysis. At this time, the contractor decides what is in this for me? Do we want to bid this? Usually a preliminary bid/no-bid decision is made and the contractor considers the following questions: Can we make this? Can we do it profitably? Can we beat the competition? Do we want to try? What will be required to do all of this? If the decision is to bid, the contractor then moves to formulate the WIN strategy.

In preparing this WIN strategy, the contractor concentrates on the theme or message it will send back to the government. These points are considered:

- Why select X corporation?
- What are the preferences of the evaluation/decision makers?
- What is the competition going to say?
- What are our resources?
- What is our technical approach?
- Why are we better?

They address these questions reflecting the evaluation criteria outlined in Section M of the RFP. In a nutshell, the contractor considers its strengths and weaknesses and how to capitalize or downplay them.

Next, the contractor moves into the proposal planning stage. At this time the contractor: selects a proposal manager and proposal team; organizes the team; and maps the team's direction. This is usually in the form of a proposal directive. Ideally, the proposal manager and team are the project manager and team if

the contractor wins the award. This is not always the case. In fact, the contractor may never intend that to be so. However, this is the preferred approach. Therefore, caution should be exercised if part of the bid evaluation is based on who (particular individuals) will perform the contract.



Additionally, many solicitations imply that the contractor should be staffed prior to contract award to gain a maximum evaluation for his bid. This causes unnecessary overhead costs for the contractor, and should be avoided. If the contractor is awarded the contract, performance is his problem. How he staffs should be his business.

RFP Phase

When the RFP (or other solicitation) is released in the *Commerce Business Daily* it is picked up and the first intense period is spent analyzing exactly what is required by Sections C, L, and M of the RFP. All questions from the preliminary bid/no-bid decision are reviewed and a final bid/no-bid decision made. If the decision is made to bid, then a responsiveness matrix is made and an authorship matrix mirroring that is prepared. The responsiveness matrix assures all requirements of the solicitation are addressed and the authorship matrix assigns a responsibility for each requirement. In this effort, each RFP requirement is broken down and assigned to a responsible author to answer it. This ensures bid responsiveness and directs employee efforts.

Next, a kickoff meeting is held and each team member is briefed on his/her responsibilities and timetables. At this time, pen has yet to touch paper. Still, incredible amounts of time, money, and effort have already been spent.

After the kickoff meeting, the volume managers (technical, management, and cost) assemble their teams and outline and storyboard their responses. Then they begin to write, prepare artwork, assemble and edit before sending the proposal to internal review teams. Every proposal team member spends major resources in terms of time and effort during this

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Proposal Process

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phase. Fifteen, 16, and sometimes more than 20-hour workdays are not uncommon during this time. It is during this time that any ambiguity, non-clarity, or incorrectness in the RFP surfaces. These faults cause great concern, wasted time, effort, and can result in poorer responses to the government. For example, a recent RFP for systems support for a vehicle system stated that the proposal should be limited to 500-600 pages.

As a component of the RFP, the solicitor asked the contractor to demonstrate how it would accomplish a Class I engineering change proposal. Doing so required 500 pages in training manual changes alone! Clearly, the author of that portion of the EFP did not know what he/she was asking or did not understand the scope! Points like this cause the contractor to request clarification. This is done while "the clock is running." Barring an extension of the due date, this robs the contractor of time to prepare a good, accurate, responsive proposal. At any rate, the volumes are prepared for internal review based on the internal schedule.

The internal review, as the term implies, is done by company managers. These reviews fall into three categories: pink team, blue team, and red team. Any proposal effort may have one, or any combination of the three. A pink team checks the integrity of the pre-RFP drafts, picks up gross errors, and brings specialized attention to certain problem areas to help flush out needed additional data. A blue team concentrates on a special technical area such as tooling, assembly, or subcontracting and reviews the text from a cost viewpoint. A red team examines all aspects of the proposal in detail as would an independent reviewer. It directs changes and improvements to the proposal. In general, red team reviews are very thorough and brutal.

The proposal team then takes the recommendations and directions of these teams and rewrites and refines the applicable portions of the proposal.

The contractor then assembles the proposal. This is no small logistical effort as the proposal may be quite voluminous. This activity may require three days to a week. Most RFPs ask for multiple copies and this complicates the task.

Finally, there is a management review and delivery. This delivery may also be a logistical problem based on the size of the proposal, the distance to the procuring agency and the time available. To be late with the proposal would mean tens of thousands of wasted dollars and no contract for the contractor. These proposals are often hand-delivered by an employee to ensure on-time arrival.

Post-RFP Phase

After the proposal is delivered, the proposal team members attempt to catch up on lost sleep and reorient themselves to a normal work schedule. They do not however stop work. They begin to prepare for requests for clarification by the government, negotiation, and requests for Best and Final Offers to the contracting agencies. After contract award, they receive a debriefing on the contract award (if requested). If awarded the contract, the proposal team often changes hats to become the "project team" and enters into a phase of contract clarification and definition. This is especially true of the more complex "systems acquisitions" by the government. A generic proposal process is summarized in Figure 2.

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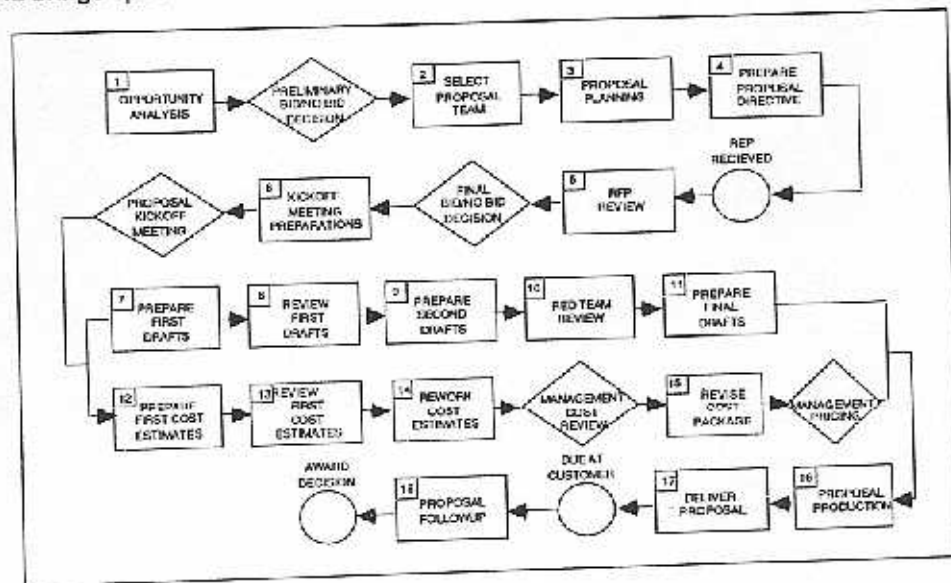


Figure 2. Generic Proposal Process Flow Diagram

Proposal Process (Continued from page 4)

Conclusion

In conclusion, it is easy to see that the proposal process is complex at best. The complexity increases with the requirements of the acquisition. For major systems, such as B-1B bomber or an M-1A1 tank, this complexity is almost beyond comprehension. In terms of doing the best we can with our limited budget dollars, it is paramount that we as government acquisition specialists ensure that our solicitations ask the correct questions and ask only those questions essential to making a wise judgment with respect to the purchase. To do otherwise causes us to receive solutions to the wrong problem, but not receive solutions to all, to receive solutions that are so costly as to be prohibitive, or to receive solutions that would lead both the government and the contractor down a disastrous path.

In terms of cost, it is essential that we receive enough valid proposals as practical so that we may choose the one that provides the most "bang for the buck." Competition will drive down the prices of government purchases only if the solicitations are correct and we receive as many qualified bids as possible.

CPT R. Mark Brown is assigned to the Army's Training with Industry Program at BMY with York, PA. He is a 1977 graduate of the U.S. Military Academy, has commanded armor units at Fort Hood, TX, and has served on the Joint Task Force in the Republic of Honduras as an operations officer. This article has been reprinted from Army Research, Development & Acquisition Bulletin, May-June 1987. O

CHISHOLM'S THIRD LAW:

Proposals, as understood by the proposer, will be judged otherwise by others.

Does the Auto Industry Need A MANPRINT Program?

by Karen Spear

The Army isn't alone in facing difficulties in matching knowledge and skills with technological advancements. The automotive industry is trying to cope with a similar challenge. In an article in the *Washington Post* ("Mechanics Struggle To Keep Up With Engineering Advances," June 14, 1987), Warren Brown reports on a national survey of mechanics. The survey, commissioned by an auto parts remanufacturer, determined that the quality of new cars has decreased rather than improved. This finding has sparked a controversy between the automotive repair industry and the auto makers. While the mechanics now consider routine maintenance checks on new cars to be major jobs because of the complexity of the technology, auto makers respond that it's not that the technology is too complex but that the mechanics don't have the skills needed to do the job.



This controversy centers on a fundamental question of quality. What represents true quality: the car that gets 20 miles per gallon and costs \$100 to fix or the one that gets 50 miles to the gallon but costs \$500 to fix? The automotive engineers maintain that quality is not just how a car looks and handles, but also how easily it can be serviced. It is precisely in this area that the new cars fail. Furthermore, the auto industry continues to make cars smaller, but stuffs them with complicated engines and electronic systems, making routine maintenance much more complex. For example, mechanics often find it difficult to deal with the computerized regulation systems in new cars and often end up throwing out a module and replacing it with another. Auto industry representatives say that the quality of the

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Auto Industry (Continued from page 5)

cars (including serviceability) continues to improve. The problem lies in the difficulty auto dealerships and repair shops have in training their mechanics to repair the cars. Many of the changes in cars occur so quickly and so frequently that it is difficult to keep mechanics caught up with the new technology.

The result of these developments in automotive technology is that the traditional profile of the auto mechanic has changed. As Brown quotes Geoff Pohanka, president and chief operating officer of Pohanka Automotive Group, "We no longer look for the lumbering mechanic who can lift heavy pieces. We look for the person who is skilled in electronics and customer communications. The service technician's job is now more of a thinking job than a physical job." Perhaps the automobile industry could benefit from some MANPRINT insights. O

Note: This is the last issue of the MANPRINT bulletin that Karen Spear will act as editor. Karen is moving to Nashville, TN where she will pursue a Ph.D. at Vanderbilt University. During her tenure, the bulletin mailing list grew from 500 a year ago to over 2,900 with this issue. We wish her the best.

Air Force Powers Up MPT Program by Kent Myers, Ph.D.

The Air Force has initiated a program called RAMPARTS which parallels MANPRINT in several ways. The program was launched at a 3-day conference in San Antonio where representatives from throughout the Air Force clarified their approach. Additional perspectives were offered by representatives from the Army, Navy, and contracting organizations.

RAMPARTS concentrates on manpower, personnel, and training (MPT). Its immediate concern is to have credible front-end assessments to present to Congress when major acquisition milestones are

reached. Its broader concerns and the full extent of the program are spelled out in a RAMPARTS handbook.

A key issue the Air Force must deal with is aircraft maintenance. Many highly skilled people are required to keep the test equipment as well as the aircraft in working order, and this creates a host of MPT challenges. In one address, a spokesman from the Air Force's reliability and maintainability program promised that technologies were being developed that would make maintenance simple and thus solve the MPT problem. Most of the listeners were skeptical that the long-term trend toward greater complexity in maintenance could be reversed so easily, especially since such promises have been made before.

A seasoned integrated logistics support (ILS) expert explained that, in addition to needing more support at high levels, the Air Force's MPT efforts will also need smart captains who will stick with the problem and build a career on it. This is how ILS succeeded through difficult times. Without such commitment and continuity, however, the program will never go far. Others pointed out that the Air Force was once very strong in MPT skills but cannot recapture that skill quickly because so many MPT leaders have retired.

The RAMPARTS Program does not encompass human factors, which will remain a strong and independent effort; nor does it include reliability and maintainability; and it may or may not include safety. Thus, RAMPARTS is not poised to address total systems integration. It focuses instead on gauging MPT implications of systems at an early stage and balancing these resources throughout the Air Force. Several new automated information systems are planned to support this work.

The RAMPARTS handbook, as well as a newsletter, can be requested from LTC Larry Howell, AF/DPXX, The Pentagon, Washington, D.C. 20330 (202) 697-6006. O

HQDA MANPRINT DEPUTY SELECTED FOR PROMOTION

Jack Pellicci is one of 56 Colonels recently announced for promotion to Brigadier General. Col. Pellicci has served as Dr. Hal Bocher's deputy in the ODCSPER MANPRINT Policy Office since October 1986. Congratulations!



Schedule of MANPRINT Courses for FY 87 and FY 88

MANPRINT Staff Officer Courses One Week MANPRINT Courses

Date	Date
27 Jul 87 - 14 Aug 87	31 Aug - 4 Sep 87
14 Sep 87 - 2 Oct 87	5 - 9 Oct 87
19 Oct - 6 Nov 87	16 - 20 Nov 87
30 Nov - 18 Dec 87	11 - 15 Jan 88
25 Jan - 12 Feb 88	22 - 26 Feb 88
7 - 25 Mar 88	25 - 29 Apr 88
4 - 22 Apr 88	23 - 27 May 88
2 - 20 May 88	27 Jun - 1 Jul 88
6 - 24 Jun 88	1 - 5 Aug 88
11 - 29 Jul 88	29 Aug - 2 Sep 88
8-20 Aug 88	

Information on course allocations can be obtained from HQDA (DAPE-ZAM), Washington, DC 20310-0300. Telephone: AV 225-9213 or COM (202) 695-9213. All courses will be held at the Casey Building, Humphrey's Engineer Support Activity Complex, Ft. Belvoir, VA, unless otherwise indicated.

COURSES MANPRINT Seminars

All located in Washington, DC

Dates

22 Jul 87
20 Aug 87

Meetings of Interest in 1987

22 - 24 September

Automatic Test Equipment International Conference, Wiesbaden, Germany. Sponsored by the National Security Industrial Association. Contact: National Security Industrial Association, 1015 15th Street, N.W., Suite 901, Washington, D.C. 20005. Telephone: (202) 393-3620.

12 - 14 October

Association United States Army Meeting. Washington, DC.

19 - 23 October

Human Factors Society Annual Meeting. New York City, NY. Contact: Human Factors Society, P.O. Box 1369, Santa Monica, CA 90406. Telephone: (213) 394-1811.

30 November - 2 December

9th Interservice/Industry Training Systems Conference (ITISC). Washington, DC. Sponsored by the American Defense Preparedness Association. Contact: American Defense Preparedness Association, Rosslyn Center, Suite 900, 1700 N. Moore Street, Arlington, VA 22209-1812, Attn: TMAS. Telephone: (703) 522-1820.

HOTLINES

MANPRINT -- (800) 252-1626; In VA: (000) 327-1626; 9:00 a.m. - 4:00 p.m.

HEL -- COM: (205) 876-2048; AV: 746-2048; 7:30 a.m. - 4:00 p.m.

Lt. Gen. Allen K. Ono, Deputy Chief of Staff for Personnel

Mr. Harry Chipman, ODCSPER Coordinator

Ms. Karen Spear, Editor

Harold R. Booher
Director, MANPRINT Policy Office

The MANPRINT Bulletin is an official bulletin of the Office of the Deputy Chief of Staff for Personnel (ODCSPER), Department of the Army. The Manpower and Personnel Integration (MANPRINT) program (AR602-2) is a comprehensive management and technical initiative to enhance human performance and reliability during weapons system and equipment design, development, and production. MANPRINT encompasses the six domains of manpower, personnel, training, human factors engineering, system safety, and health hazard assessment. The focus of MANPRINT is to integrate technology, people, and force structure to meet mission objectives under all environmental conditions at the lowest possible life-cycle cost. Information contained in this bulletin covers policies, procedures, and other items of interest concerning the MANPRINT Program. Statements and opinions expressed are not necessarily those of the Department of the Army. This bulletin is published monthly under contract by Automation Research Systems, Ltd., 4401 Ford Avenue, Suite 400, Alexandria, Virginia 22302, for the Office of the Special Assistant to the Deputy Chief of Staff for Personnel (MANPRINT) under the provisions of AR 310-2 as a functional bulletin. Proposed articles, comments, or suggestions should be mailed to MANPRINT Bulletin, Attn: HQDA (DAPE-ZAM), Washington, DC 20310-0300. Telephone: Commercial (202) 695-9213 or Autovon: 225-9213.